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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,215

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David Magda Eddy Corynen

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EXAMINER

LE, HUYEN D

ART UNIT

PAPER NUMBER

2614

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/567,215	<b>Applicant(s)</b> CORYNEN, DAVID MAGDA EDDY	
	<b>Examiner</b> HUYEN D. LE	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 5, 7, 9, 10, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Faraone (U.S. patent 4,881,617).

Regarding claims 1 and 9, Faraone teaches a loudspeaker provided with a frame (1, 13, 17, 19), a membrane (5, 7, 9) having a substantially flat outer circumferential edge (figures 1, 4, 5) suspended from the frame (1, 13) and a substantially flat inner circumferential edge (figures 1, 2, 4), and a drive unit having a stationary part (see the magnetic circuit in figure 4) and a translatable part (3, figures 1 and 4) provided with a coil support secured to the substantially flat inner circumferential edge of the membrane and comprising an electric coil as claimed. As shown in figures 1, 2, 4, 5 and 8, the membrane (5, 7, 9) includes a membrane body, which, viewed in a circumferential direction, has a pattern of folds radially extending between the substantially flat inner circumferential edge and the substantially flat outer circumferential edge of the membrane and, viewed from the drive unit, has a ring-shaped recess as claimed.

Regarding claims 2 and 10, Faraone shows the membrane body which is a concave body, and the substantially flat inner and outer circumferential edges being in parallel planes as claimed (figure 4).

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Regarding claim 4, the substantially flat inner circumferential edge of the membrane (5, 7, 9) of Faraone is adhered to the coil support (3) as claimed (figures 1 and 4).

Regarding claims 5 and 12, as broadly claimed, Faraone shows the folds having a depth, measured from the membrane body, which smoothly decreases towards the substantially flat outer circumferential edge of the membrane (figures 4, 5).

Regarding claims 7 and 14, Faraone shows an inner portion of the edge of the membrane adjoining the substantially inner circumferential edge of the membrane having the portion as claimed (figures 1, 2).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 3, 6, 8-11, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haerther, Jr (U.S. patent 2,960,177).

Regarding claims 1 and 9, Haerth teaches a membrane for a loudspeaker, wherein the loudspeaker comprises a drive unit having a translatable part provided with an electric coil and a coil support (5, 34) as claimed (col. 3, lines 70-73 and col. 4, lines 33-40). Haerther teaches a membrane (1, 2, 32 figures 1, 2, 6 and 7) having a substantially flat outer circumferential edge (see the flange or the rim 4, figures 1, 2, 6 and col. 2, lines 40-42 and col. 4, lines 33, 34) and a substantially flat inner circumferential edge (figures 2, 7) as claimed. As shown in figures 1, 2,

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6 and 7, and the membrane includes a membrane body, which, viewed in a circumferential direction, has a pattern of folds radially extending between the substantially flat inner circumferential edge and the substantially flat outer circumferential edge of the membrane, and viewed from the direction of the drive unit, has a ring-shaped recess as claimed.

Haerther does not specifically disclose a frame as claimed. However, providing a frame for a loudspeaker is known in the art.

Therefore, it would have been obvious to one skilled in the art to provide a frame for the loudspeaker of Haerther for better protecting the membrane.

Further, Haerther does not show a drive unit having a stationary part secured to the frame and provided with a magnet system. However, providing a magnetic circuit with a stationary part secured to a frame is well known in the art.

Since Haerther does teach that a voice coil of a dynamic speaker can be mounted on the tubular member (5, 34) for driving the membrane (1, 32); it therefore would have been obvious to provide a magnetic circuit with a stationary part secured to the frame for providing a magnetic field to the voice coil.

Regarding claims 2 and 10, Haerther shows a concave body (2, 33), and the substantially flat inner circumferential edge and the substantially flat outer circumferential edge being in parallel planes as claimed (figure 4).

Regarding claims 3 and 11, Haerther shows a flat body (1, 32), and the substantially flat inner circumferential edge and the substantially flat outer circumferential edge being in substantially coinciding planes.

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Regarding claims 6 and 13, as broadly claimed, Haerther shows the folds (12, 13, 16, 17) having a depth, measured from the membrane body, which smoothly decreases towards the substantially flat inner circumferential edge of the membrane (col. 3, lines 15-17).

Regarding claims 8 and 15, Haerther shows the pattern of folds which is a non-uniform pattern as claimed (figures 1, 2).

### ***Response to Arguments***

5. Applicant's arguments filed 12/10/08 have been fully considered but they are not persuasive.

Responding to the arguments about the limitations of the membrane having the substantially flat outer and inner circumferential edges and the membrane body, which, viewed from the drive unit, has a ring-shaped recess as claimed in claims 1 and 9, the examiner has explained in detail in the Office Action.

The Applicant should note that Faraone does show a substantially flat outer circumferential edge (figures 1, 4, 5) of the membrane (5, 7, 9) being suspended from the frame (1, 13) and a substantially flat inner circumferential edge of the membrane (figures 1, 2, 4). As shown in figures 1 and 4, the membrane (5, 7, 9) includes a membrane body, which, viewed from the drive unit, has a ring-shaped recess as claimed.

Further, Haerther does teach a substantially flat outer circumferential edge (see the flange or the rim 4, figures 1, 2, 6 and col. 2, lines 40-42 and col. 4, lines 33, 34) of a membrane (1, 2, 32), and a substantially flat inner circumferential edge (figures 2, 7) as claimed. As shown in

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figures 1 and 2, the membrane includes a membrane body, which, viewed from the drive unit, has a ring-shaped recess as claimed.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN D. LE whose telephone number is (571) 272-7502. The examiner can normally be reached on 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUYEN D. LE/  
Primary Examiner, Art Unit 2614

HL  
June 19, 2009